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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,355	08/25/2003	Arnold Sheynman	CS23240RA	2226
20280	7590	03/10/2005	EXAMINER	
MOTOROLA INC 600 NORTH US HIGHWAY 45 ROOM AS437 LIBERTYVILLE, IL 60048-5343			FERGUSON, KEITH	
			ART UNIT	PAPER NUMBER
			2683	

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/647,355

Applicant(s)

SHEYNMAN ET AL.

Examiner

Keith T. Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 35-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/1/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-34, drawn to maintaining a communication connection during cell reselection, classified in class 455, subclass 436.

II. Claims 35-41, drawn to a base station with protocol converting within multiple networks, classified in class 455, subclass 561.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions I and II have different modes of operation.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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4. During a telephone conversation with Lawrence Chapa on February 23, 2005, a provisional election was made without traverse to prosecute the invention of I, claims 1-34.

Affirmation of this election must be made by applicant in replying to this Office action. Claims 35-41 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United

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States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-5,10-12,15-21,27,28,33 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Cao et al..

The claimed invention reads on Cao et al. as follows:

Regarding claims 1-3,10-12,15-17, Cao et al. discloses a method (fig. 2) for maintaining a communication connection during a cell reselection (paragraph 0033 through paragraph 0048), the method comprising: communicating in a first operating mode (UMTS) (paragraph 0033 through paragraph 0048); monitoring communication conditions, while operating in the first operating mode) (paragraph 0033 through paragraph 0048); determining an approximate time when the communication conditions are consistent with executing a reselection from a first cell to a second cell (paragraph 0033 through paragraph 0048)) ; switching from a first mode of communication to a second mode (GPRS) of communication prior to the determined approximate time for reselection (paragraph 0033 through paragraph 0048), and executing a handover from a first cell to a second cell, while in the second operating mode (paragraph 0049).

Regarding claim 4, Cao et al. discloses the first cell is dropped (released) (paragraph 0037 and paragraph 0048).

Regarding claim 5, Cao et al. discloses a operating mode includes a packet data communication mode (paragraph 0033).

Regarding claims 18-21,27,28,33 and 34 Cao et al. discloses a mobile user terminal (communication controller)(cellular telephone)(fig. 1 number 22) comprising: a multi-mode controller (paragraph 0033); a cell reselection predictor coupled to the multi-mode controller (paragraph 0034); and a handover controller coupled to the multi-mode controller (paragraph 0033); wherein the multi-mode controller is adapted for generating control signals for switching between a first operating mode (UMTS/GPRS)(paragraph 0033 through paragraph 0049), which does not maintain a communication connection during a cell reselection (paragraph 0033 through paragraph 0049), and a second operating mode which does maintain a communication connection during a handover, prior to the time that the need for a cell reselection is predicted (paragraph 0033 through paragraph 0049).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at

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the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cao et al. in view of Landais et al..

Regarding claim 6, Cao et al. discloses a method as discussed supra in claims 1 and 5 above. Cao et al. differs from claim 6 of the present invention in that it does not explicitly disclose the packet communication mode uses a communication protocol conforming to at least one of a general packet radio service (GPRS) standard. Landais et al. teaches a packet communication mode uses a communication protocol conforming to at least one of a general packet radio service (GPRS) standard (paragraph 0030). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cao et al. with the packet communication mode uses a communication protocol conforming to at least one of a general packet radio service (GPRS) standard in order for the mobile user to have the capabilities to communicate in the GPRS area when performing a cell reselection handoff, as taught by Landais et al..

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cao et al. in view of Demetrescu et al..

Regarding claim 7, Cao et al. discloses a method as discussed supra in claims 1 and 5 above. Cao et al. differs from claim 7 of the present invention in that it does not disclose a packetized voice data. Demetrescu et al. teaches a mobile station uses voice over GPRS (col. 4 lines 23-29). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Cao et al. with packetized voice data in order for the mobile user to communicate voice over GPRS (VoGPRS), as taught by Demetrescu et al..

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11. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cao et al. in view of Demetrescu et al. as applied to claims 1,5,7 above and in further view of Bao et al..

Regarding claims 8 and 9, the combination of Cao et al. and Demetrescu et al. differs from claims 8 and 9 of the present invention in that they do not disclose a push to talk call session and a voice over internet protocol (VoIP) call session. Bao et al. teaches a push to talk call session (paragraph 0015) and a voice over internet protocol (VoIP) call session (abstract, and paragraph 0014). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the combination of Cao et al. and Demetrescu et al. with a push to talk call session and a voice over internet protocol (VoIP) call session in order for the mobile user to negotiate data communication session when reselecting a cell during handover, as taught by Bao et al..

12. Claims 13,14,22-26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cao et al. in view of Muhonen.

Regarding claims 13-14,29, Cao et al. discloses a method/communication controller as discussed supra in claims 1 and 18 above. Cao et al. differs from claim 13,14 and 29 of the present invention in that it does not disclose an operation mode is a circuit switched connection which is a high speed circuit switched data (HSCSD) connection. Muhonen teaches an operation mode is a circuit switched connection (abstract and col. 11 lines 40-53). Therefore, it would have been obvious to one of

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ordinary skill in the art at the time the invention was made to modify Cao et al. with an operation mode is a circuit switched connection which is a high speed circuit switched data (HSCSD) connection in order for the mobile user to communicate in voice from a GSM network to a Packet network when using roaming between networks, as taught by Muhonen.

Regarding claims 22-26, Cao et al. discloses a communication controller as discussed supra in claims 18 and 21 above. Cao et al. differs from claim 22 of the present invention in that it does not explicit disclose an idle state, corresponding to no active communication; a packet mode state, corresponding to an active communication state when no reselection is at least one of occurring and pending; and a circuit switched mode state, corresponding to an active communication state while a reselection is at least one of occurring and pending. Muhonen teaches an idle state (GSM idle)(fig. 5), corresponding to no active communication (col. 9 lines 40-59); a packet mode state (GPRS), corresponding to an active communication state when no reselection is at least one of occurring and pending (col. 9 lines 40-59); and a circuit switched mode state (GSM Solsa), corresponding to an active communication state while a reselection is at least one of occurring and pending (col. 9 lines 40-59 and col. 10 line 30 through col. 11 line 16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

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was made to modify Cao et al. with an idle state, corresponding to no active communication; a packet mode state, corresponding to an active communication state when no reselection is at least one of occurring and pending; and a circuit switched mode state, corresponding to an active communication state while a reselection is at least one of occurring and pending in order for the user mobile terminal to choose a cell from a different network when roaming from the UTRAN network to the GPRS network to complete a communication session, as taught by Muhonen.

13. Claims 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cao et al. in view of Bao et al..

Regarding claims 30 and 31, Cao et al. discloses a communication controller as discussed supra in claim 18 above. Cao et al. differs from claims 30 and 31 of the present invention in that it does not explicit disclose a push to talk call session and a voice over internet protocol (VoIP) call session. Bao et al. teaches a push to talk call session (paragraph 0015) and a voice over internet protocol (VoIP) call session (abstract, and paragraph 0014). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the Cao et al. with a push to talk call session and a voice over internet protocol

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(VoIP) call session in order for the mobile user to negotiate data communication session when reselecting a cell during handover, as taught by Bao et al..

14. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cao et al. in view of Akhteruzzaman et al..

Regarding claim 32, Cao et al. discloses a communication controller as discussed supra in claim 18 above. Cao et al. differs from claim 32 of the present invention in that it does not explicit disclose a protocol converter, which is adapted for selectively converting the format of the information to be transmitted and information received between a format supporting the first operating mode and a format supporting the second operating mode. Akhteruzzaman et al. teaches a mobile subscriber station comprising protocol conversion, which is adapted for selectively converting the format of the information to be transmitted and information received between a format supporting the first operating mode and a format supporting the second operating mode (page 4, claim 1 line 1 through page 5 line 36). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cao et al. dual mode terminal with a protocol converter, which is adapted for selectively converting the format of the information to be transmitted and information received between a format supporting the first operating mode and a format supporting the second operating mode in order for the mobile terminal to be able to operate in both systems, as taught by Akhteruzzaman et al..

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith T. Ferguson whose telephone number is (703) 305-4888. The examiner can normally be reached on 6:30am-5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703) 308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Keith Ferguson  
Art Unit 2683  
March 1, 2005

